

## **ABSTRACT OF THE DISCLOSURE**

Process for the recovery of an ethylene and propylene containing stream from a cracked gas resulting from cracking a hydrocarbon stream, wherein the cracked gas is treated in an absorptive demethanizer with a C<sub>4</sub>/C<sub>5</sub> solvent at a temperature between -10°C and - 40°C to free the cracked gas from methane and hydrogen gas, whereafter the remaining stream is treated by distillation in a distillation unit to obtain a C<sub>4</sub>/C<sub>5</sub> containing stream and the ethylene and propylene containing stream; whereafter the C<sub>4</sub>/C<sub>5</sub> stream is treated with a hydrogen containing stream in a hydrogenation unit, whereafter a part of the hydrogenated C<sub>4</sub>/C<sub>5</sub> stream is cooled to a temperature between -10°C and -40°C and recycled to the absorptive demethanizer and a part of the hydrogenated C<sub>4</sub>/C<sub>5</sub> stream is separated.